

claims 94-96, 100-105, 108-111, 118-126, 128, 129, 131, 132, 136-141, 144-147, 154-157, 160, 164-169, 172-175, 182-192, 195, 196, 200-219, 234-240, 242, 245-248, 250, 253-258 and 260-265 stand rejected under 35 USC §102(b) as being anticipated by Mobile Data Network Description (TF Report 3/89). These rejections are traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 94-96, 100-105, 108-111, 118-129, 131, 132, 136-141, 144-147, 154-157, 160, 164-169, 172-175, 182-193, 195, 196, 200-205, 208-211, 218, 219, 234-240, 242, 245-248, 250, 253-258 and 260-265 are not taught or suggested by Zabarsky or the TF Report 3/89 article whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw these rejections.

Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. Anticipation requires that a prior art reference disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. *Id.* "In addition, the prior art reference must be enabling." *Akzo N.V. v. U.S. International Trade Commission*, 808 F.2d 1471, 1479 (Fed. Cir., 1986). That is, the prior art reference must sufficiently describe the claimed invention so as to have placed the public in possession of it. *In re Donohue*, 766 F.2d 531, 533 (Fed. Cir. 1985). "Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his own knowledge to make the claimed invention."

As stated in MPEP § 706.02(b), a rejection based on 35 U.S.C. § 102(e) can be overcome by filing an affidavit or declaration under 37 C.F.R. § 1.131 showing prior invention. The declaration shall set forth facts that establish reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application. See 37 C.F.R. § 1.131 (b); MPEP § 715.

The Office Action has presently rejected claims under 35 U.S.C. § 102 as allegedly being anticipated by: (1) Zabarsky and (2) the collection of documents referred to as MDN '89 or Telenor. Each reference is discussed below:

1. The Office improperly rejects the claims under 35 USC §102(b) as being anticipated by Zabarsky.

Zabarsky simply teaches a communication system for carrying messages via a radio channel between one central site of a plurality of sites and a plurality of two-way remote data units. Specifically, Zabarsky is simply directed to a wireless communication system which allows for wireless communications to be conducted between other wireless communication systems. At no point is there any teaching or suggestion in Zabarsky of an electronic mail system which allows for electronic mail to be originated by executing electronic mail programming and the electronic mail being routed to a wireless device through a wireless system. As recited in the claims, the communication system includes a system which receives electronic mail from

a plurality of originating processors. At no point is there any teaching or suggestion Zabarsky.

Further, at no point is there any teaching or suggestion in Zabarsky that the system which receives electronic mail determines if the received electronic mail should be transmitted to the wireless system or not. Thus, as in the present invention the electronic mail can be sent to the wireless device via the wireless system or to another processor which is connected to the electronic mail system. Such features are clearly not taught or suggested by Zabarsky.

Therefore, Zabarsky fails to teach or suggest numerous features of the present invention as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 USC §102(b) rejection of the claims based on Zabarsky is respectfully requested.

2. The Office Improperly rejects the claims under 35 U.S.C. § 102(B) As Being Anticipated By Norwegian Telecommunication Administration Study Of Message Handling In A Mobile Communication System And Mobile Data Network (MDN) (TF Project No. 169.2 'Mobilt Spesialnett') Comprising Volumes 1-4 And 6-8 Published In 1989 ("Telenor").

a. The Telenor Documents Do Not Qualify As Printed Publications Under 35 U.S.C. § 102(b) Because They Have Been Manipulated and Altered Since Their Creation.

The Telenor documents are not authentic. As discussed in detail below, the Telenor Documents are not printed publications as that term finds meaning under 35 U.S.C. § 102(b).

Two sets of documents are actually at issue. The first set was allegedly lodged at the Trondheim University Library ("Library") in 1986 and 1989. Applicants questions the whereabouts and current state of this first set of documents. The second set of documents are those retrieved from the Library in 2005 by Requestor RIM initially and then by Applicants in order to analyze their contents. This second set of documents is relied upon by the Office in the present reexamination. Applicants has submitted significant and compelling evidence proving that these two sets of documents are different. In particular, Applicants has submitted the Declaration of David Richard Browne under 37 C.F.R. § 1.132 ("Browne Declaration"), which details that the Telenor Documents cited by the Office have been significantly altered at some point subsequent to their creation.

As used in this subsection, the term "Telenor Documents" refers to the documents cited in the present reexamination.

The Telenor Documents do not qualify as printed publications under 35 U.S.C. § 102(b) because they have been manipulated and altered since their creation. There is no evidence that the Telenor Documents, in their present form, were available as a printed publication prior to one year before the application that matured into the present patent was filed. At most, the Office has established that an altered set of documents was present in the Library in 2005. All rejections based on the Telenor Documents must be overturned.

(i) The Law of Anticipation By Printed Publications

Whether a document qualifies as a printed publication under 35 U.S.C. § 102 is a legal conclusion based on underlying factual determinations. *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1377 (Fed. Cir. 2006).

If there is no disputed issue of material fact, the question of whether a particular reference is a printed publication is one of law. *Id.*

The initial burden of establishing a *prima facie* case of anticipation by printed publication falls to the examiner. See *Ex parte Natale*, 11 U.S.P.Q.2d 1222, 1226 (Bd. Pat. App. & Int. 1989) (holding lack of evidence that a particular document qualified as a publication in a reexamination proceeding).

However, *prima facie* evidence of the date and existence of a printed publication may be rebutted by convincing factual evidence to the contrary. See *Ex parte Research and Manufacturing Co. Inc.*, 10 U.S.P.Q.2d 1657, 1660 (Bd. Pat. App. & Int. 1989). That is, once the Office cites a reference and offers up a nominal publication date, Applicants may successfully rebut this evidence by providing evidence to the contrary. See *Id.*

A preponderance of evidence is required to reject patent claims pending in a reexamination proceeding. See *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992); *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988); 35 U.S.C. § 305 (“reexamination will be conducted according to the procedures established for initial examination...”). “[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability. If that burden is met, the burden of coming forward with evidence or argument shifts to the applicant. After evidence or argument is submitted by the applicant in response, patentability is determined on the totality of the record, by a preponderance of evidence with due consideration to persuasiveness of argument.” *In re Oetiker*, 977 F.2d at 1445. Thus, a rejection must be reversed if the weight of the evidence

proves that a putative reference does not qualify as a printed publication under 35 U.S.C. § 102(b). See *Ethicon*, 849 F.2d at 1427.

In the present instance, the Telenor Documents are unreliable as anticipating printed publications based on the only evidence before this Board on that point. In fact, the evidence proves that the Telenor Documents did not exist in their current form in the Library in 1989.

(ii) The Altered Telenor Documents Are Not Prior
Art Printed Publications

The Office has, at most, presented some evidence of the Telenor Documents' alleged publication date. Applicants, in turn, has effectively rebutted any such evidence by supplying credible and compelling evidence that disproves that the Telenor Documents were available as a printed publication, in their current form, in 1989.

That the Telenor Documents have been altered since their creation is beyond question. Indeed, Mr. Browne's sworn declaration includes many details of such tampering. For example, someone removed the staples from Volume 1 and re-assembled it using pages taken from different booklets. See Browne Declaration, ¶¶ 14, 17, 18 and 20-22. Someone replaced the original text on certain pages of Volumes 1, 7 and 8, as evidenced by a disparity between page headers and page text. See Browne Declaration, ¶¶ 32, 39 and 40. Although some of the documents were alleged to have been produced on the same date, it is clear from copying artifacts that someone used different copying machines for their production. See Browne Declaration, ¶¶ 35, 36 and 37. Certain select pages sprinkled throughout Volumes 1, 3, 4, 6 and 8 are printed on paper different from the rest of those documents. See Browne Declaration, ¶¶ 28, 34 and 37-39. In light of the

substantial evidence of alteration, Mr. Browne concludes that someone added much of the text appearing in the Telenor Documents to pre-existing pages. See Browne Declaration, ¶ 45. Applicants will not speculate on who effected such alterations or why.

(iii) Mr. Browne's analysis led to the following statements, findings and conclusions, all of which are contained in Mr. Browne's report which is attached as Exhibit 2 to the Browne Declaration

Mr. Browne indicates that all of the documents examined were in booklet form. The first is stapled with three staples down the left margin and has a clear plastic front cover. Documents 2 to 8 are 'Perfect bound' booklets down the left edge between card covers and with a cloth strip around the edge. See Browne Declaration, ¶9.

Mr. Browne was instructed that all the documents allegedly describe a Mobile Data Network from the mid to late 1980s. Mr. Browne was also instructed that all of the documents were lodged in the library of the Trondheim University in Norway. The documents came to Mr. Browne, via Hunton & Williams, from that library. The dates at the end of each line in the above list are in European convention (i.e., day/month/year) and relate to the date on a rubber stamp on the front of each document. They purport to be the dates each document was lodged in the library. See Browne Declaration, ¶10.

Mr. Browne was asked to examine the documents to see if there is any evidence that the contents of the documents may have been manipulated in any way - particularly since their original production. Given his educational training and professional experience, Mr. Browne was fully qualified to conduct an analysis and opine on this matter. See Browne Declaration, ¶11.

Mr. Browne examined the documents using various specialized lighting conditions. Ultra Violet light (UV) was used to detect any chemical changes to the paper. The background reaction by paper to UV varies from batch to batch and therefore UV can also be useful to identify different papers. This is particularly helpful if any chemical ink eradicators had been used on a document. Infrared light (IR) can be used to separate one ink from another. IR is absorbed at differing rates by different inks and these differences can be observed. High Intensity Blue Green light (BG) can be used to excite inks so that a luminescent reaction is caused in the infrared part of the spectrum. This luminescent reaction varies from ink to ink. See Browne Declaration, ¶12.

Document 1 has been bound into a blue card cover that covers the whole of the back but only the first inch, from the left edge, of the front - folded round from the back. A clear plastic sheet has been inserted at the front as a front cover and the whole booklet has been fastened together with three staples, approximately half an inch in from the left edge. See Browne Declaration, ¶13.

There are three pairs of holes slightly to the left of the staples in place. These are also visible at the back. These holes are commensurate with three staples having been present and having been removed. See Browne Declaration, ¶14.

In order to properly establish what has happened to the document, Mr. Browne removed the staples from the book to release the pages. Each staple has been preserved so it can be examined in the future. See Browne Declaration, ¶15.

Mr. Browne examined all the pages in the booklet. He noted that it has been produced in chapters. Behind a number of the chapters, there are illustrations and charts. Mr. Browne noted that the charts/illustration appear to have been printed on slightly different paper and using different printers from the rest of the Document. See Browne Declaration, ¶16.

Microscopic examination showed that, while it was possible to match the recently vacated staple holes, there was a slight disparity between the original holes in chapter 6 and those in chapter 7 and subsequent chapters. See Browne Declaration, ¶17

Mr. Browne noted there were slight abrasions on the paper within the pair of old staple holes at the top of page 7-1. Similar scratches can be seen within the pair of old staples holes at the bottom. See Exhibit 3 to Browne Declaration. These marks are clear signs that an implement was used to remove staples from the page/s. See Browne Declaration, ¶18

When staples are forced through a document or set of pages, the machine curls the tines (prongs) back towards the pages from the back. The ends of the tines often make marks in the back page and sometimes these marks can be seen several pages from the back. At the front of the stapled pages, the solid bar makes a marked dent in the paper between the holes. This dent can also be seen several pages down from the front. See Browne Declaration, ¶19.

There is no evidence of a dent in page 7-1. This indicates that it was not the top page of the stapled document, nor very close to the top. However, the scratch marks show that, at the time the staples were removed, page 7-1 was at the top. The most likely explanation for this is that pages were

removed from the stapled booklet one at a time from the front. Only when 7-1 was reached was the decision made, that the staples should be removed properly. See Browne Declaration, ¶20.

The fact that Mr. Browne could not match exactly the old staples holes from chapter 6 and before with those in 7-1 indicates that they may not have been stapled together. See Browne Declaration, ¶21.

Mr. Browne considers these findings are strong evidence that the two sets of documents were once part of different booklets. It is possible that the back of one booklet (7-1 and after) was put behind the front of another booklet (chapters 1-6). The whole was then stapled together within the cover. See Browne Declaration, ¶22.

Mr. Browne noted from the tine-marks at the back that a different stapler was used the second time. The first stapler curled the tines back straight between the holes. The second stapler curled the tines to one side of the line of the staple. See Browne Declaration, ¶23.

Mr. Browne could find no evidence of the date of any part of the document, which would indicate when it may have been produced. It is not possible to state when the documents were dismantled and reassembled. See Browne Declaration, ¶24.

The other documents all purport to have been made in 1989. All have been produced in the form of bound books. They have all been 'Perfect' bound. This means that the pages have been bound together along one edge. The pages are bound by applying heated glue down one edge. This glued edge is normally protected by covering the spine with a layer of paper from one cover or a cloth strip. No stitching is used and no page surface is

lost. In this case the pages are bound down the left edge. See Browne Declaration, ¶25.

The advantages of this system of binding are that it tends to be quick and cheap and can be performed by relatively inexperienced people. It is also relatively easy to melt the glue to change pages without any visible signs. The main disadvantage is that pages can fall out by accident because the strength of the binding is limited by the amount of glue used. See Browne Declaration, ¶26.

Mr. Browne examined all the books under UV light. Mr. Browne noted that a number of the pages within each book were from different batches of paper. Mr. Browne could not find any reason for this - unlike in document 1 where different paper was used for the diagrams, which were also printed on different printers. See Browne Declaration, ¶27.

Mr. Browne noted that the following pages differed from the rest in 3/89, Volume 1. The TF front page, pages 3, 11, 19, 35 and 43. See Browne Declaration, ¶28.

All of the pages have been printed using dry-powder printing techniques, such as are used for laser printers or photocopiers. Modern dry-powder printers work by laser beams charging precise positions on a photoreceptive drum. Dry powder is attracted to only those places before being transferred to the paper where it is melted in position. Extraneous marks on the drum also attract powder and extra marks will be printed on the document. These marks are known as "Trash-marks". Printer drums differ in size from a small drum that rotates several times per printed page to the large drum that rotates only once per page. A trash-mark on the former will be

repeated a number of times up the page while the latter will produce the mark once per page. See Browne Declaration, ¶29.

The need to place a document on a glass plate of a photocopier makes those machines prone to trash-marks. Any speck of dust, correcting fluid or ink on the glass will be copied as a black mark onto the document. This is the most common cause of trash-marks. The marks occur on every document copied and in the same relative position. See Browne Declaration, ¶30.

Mr. Browne considers that all of the pages have been photocopied. See Browne Declaration, ¶31.

Mr. Browne notes that the top line on each page of 3/89, Volume 1, i.e. the line starting "Volume 1:" and ending with the page number is poorly printed and formed. See Exhibit 4 of Browne Declaration. The disparity between this header on each page and the rest of the text indicates that the contents of the page have been copied onto paper on which a copy of the header already exists. This indicates that the original text on the page has been replaced in each case. See Browne Declaration, ¶32.

4/89, Volume 2, has also been photocopied. The header line throughout was produced at a different time from the rest each page, which has been copied onto it. Mr. Browne notes that the page numbering changed for the annex, i.e. after page 107. The numbers move from the outside of each page to the inside. Mr. Browne noted no different UV reaction with any of the pages in this book. However, the overall UV reaction is the same as the bulk of the pages in 3/89. See Browne Declaration, ¶33.

With 5/89, Volume 3, Mr. Browne notes that there is no difference between the content of each page and its header. The whole document has

been photocopied. Mr. Browne notes the following pages have different UV reactions: 13, 21, 29, 37, 45, 53, 61, 69, 77, 85, 89, 97, 105, 113 and 129. Mr. Browne notes that there is a trash mark approximately 4" down from the top near the right margin. See Exhibit 5 of Browne Declaration. This mark can be seen on each page. This indicates that the whole document was copied while the photocopier was producing that mark. The bulk of the paper has the same UV reaction as the bulk of the paper used for documents 4 & 4/89. See Browne Declaration, ¶¶34.

According to the TF front sheet, it was purportedly produced on the same date - 6/2/89 - as the other two documents. They do not have the same trash mark. See Browne Declaration, ¶¶35.

Mr. Browne cannot explain how three documents, allegedly produced on the same date, using the same paper and all by photocopier, do not produce the same trash marks. See Browne Declaration, ¶¶36.

Document 6/89, Volume 4, has the same faults in the header as 3/89, Volume 1 & 4/89, Volume 2. Mr. Browne also noted that the following pages appear to have been made on different paper: Preface, 3, 11, 19, 27, 35, 43, 61 and 93. The bulk of the paper is the same as the previous 3 books. The trash marks seen in 5/89, Volume 3 are not in this document, even though it was purportedly produced on the same date 6/2/89. See Browne Declaration, ¶¶37.

Document 7/89, Volume 6, apparently has been purportedly produced at one time. This means that the header and the page contents are commensurate with each other. The following pages have been produced on different paper. Contents I, 3, 11, 19, 27, and 35. The bulk of the paper is the

same as for the other books. It was purportedly produced on 6/2/89 but has none of the trash marks mentioned above. See Browne Declaration, ¶¶38.

Document 8/89, Volume 8, was also produced on 6/2/89. It does not have the trash marks seen in 5/89, Volume 3. It does have the same problems with the header throughout, in that the contents of each page were copied onto a page already bearing the header. Pages up to page 14 are loose, having become detached from the binding strip. Mr. Browne notes that the pages from page 83 to the end are produced on similar paper was used for the bulk of the previous books - 3/89, Volume 1 to 7/89, Volume 6. However the first pages, i.e. up to page 82 are significantly lighter under UV. See Exhibit 6 of Browne Declaration - comparing pages 82 with 83. The difference between the papers can also be seen in normal lighting. This book has clearly been produced on two separate papers and probably at different times. See Browne Declaration, ¶¶39.

Document 9/89, Volume 7, has the same header problems mentioned above. The whole document has been produced on the lighter paper used for the first half of 8/89, Volume 8. This document was purportedly produced on 15/2/89. Exhibit 7 shows the comparison of pages 14 of 9/89, Volume 7 with 3/89, Volume 1. See Browne Declaration, ¶¶40.

What is difficult to explain is why the first half of book 8/89, Volume 8, is on paper that is the same as that used for the next book in the series (produced some days later) while the second half uses the same paper as the previous 5 books. It should also be borne in mind that the TF sheet giving the date of production, is produced on paper that was purportedly used on

15/2/89 - even though the date shown is 6/2/89, the same as the previous books. See Browne Declaration, ¶41.

All of the books have been endorsed with a rubber library stamp showing the date the books were filed/lodged. Mr. Browne considers the same basic stamp was used for all the 89 books. A different stamp was used for the 1986 book. The stamps all have a moveable date band and it will be the work of a few seconds to wind dates backwards or forwards. See Browne Declaration, ¶42.

It should be noted that, without reference to the stamps used in the library, Mr. Browne has no way of judging the authenticity of the stamps, nor of their usage. Moreover, without sight of other books or papers in the library from the same period, Mr. Browne cannot assess when certain papers were in use and also which copiers may have been in use. See Browne Declaration, ¶43.

It should also be borne in mind that the stamps are only applied to the outside of the covers. The pages can be removed and replaced. It follows therefore that what is endorsed on the outside of the covers is no guarantee of the contents. See Browne Declaration, ¶44.

In Mr. Browne's opinion, there is evidence that all of the books have been put together as a collection of disparate parts. It is clear that much of the text has been added to existing pages. This is evidenced by the re-use of existing headers to introduce the current text. See Browne Declaration, ¶45.

Moreover, Mr. Browne considers that different papers have been sporadically used. See Browne Declaration, ¶46.

Although many of the books purport to have been produced at the same time, there is considerable evidence that this is not the case. See Browne Declaration, ¶47.

Documents 8/89, Volume 8, and 9/89, Volume 7 clearly show where part of the book 8/89, Volume 8 has been added after the event. See Browne Declaration, ¶48.

Without knowledge of other documents in the University library and or the Telecommunications Research Institute and the control procedures in use, or the copiers in use, it is not possible to give a definite opinion as to the dates of any alterations. See Browne Declaration, ¶49.

However, Mr. Browne's findings are significant and do cast doubt as to when these documents were created, when changes were made and what text was actually on the pages when they were first filed. See Browne Declaration, ¶50.

(iv) This Evidence Requires Reversal of All
Rejections Based on the Telenor Documents

In view of the circumstances set forth above and in the Browne Declaration, the Telenor Documents are not "printed publications" under 35 U.S.C. § 102. In particular, the presently known circumstances do not demonstrate that the Telenor Documents were actually publicly available prior to the critical date of the patent being reexamined. Even if Applicants assumes, for the sake of argument, that some variation of the Telenor Documents was shelved as of the critical date and was properly indexed and catalogued as of the critical date, there is no evidence that the as-filed documents are the same as the set that was disclosed to the Patent Office on September 29, 2005.

The Browne Declaration is entitled to significant evidentiary weight. Indeed, the Browne Declaration consists nearly entirely of facts, which were determined by an internationally-recognized expert based on extensive hands-on analysis of the Telenor Documents. More particularly, the Browne Declaration constitutes sworn, first-hand evidence that the Telenor Documents are not entitled to the prima facie publication date asserted by the Office.

The Office's citation to a letter from the Rector's Office at the Norwegian University of Science ("Letter") does not even address, let alone rebut, the Applicants's evidence that someone altered the Telenor Documents. Indeed, the Letter merely asserts that the Library catalogued certain documents in 1986 and 1989. The Letter makes no assertions whatsoever regarding whether the Telenor Documents are identical to those it received nearly twenty years ago. The Letter states that, "[f]rom the moment the reports were catalogued in BIBSYS, they were searchable and publicly available. They could be borrowed by anybody who came to the library and at that time we had inter-library loan connections with all parts of the world." Letter, page 4 (emphasis added). Thus, nearly anyone in the world could obtain and alter the documents that were deposited in 1986 and 1989. With an average check-out time of three months, such a person could alter or manipulate the documents at their leisure. See Declaration of Kevin P. Anderson Relating to the Telenor Documents Under 37 C.F.R. § 1.132, ¶ 4, submitted with Applicants's Redacted Supplemental Response to Office Action of November 30, 2005. In light of the substantial, detailed evidence of

alteration, the Letter's assertions about documents as they existed nearly two decades ago are non sequiturs, at best.

The facts here are similar to *Ex parte Research and Manufacturing Co. Inc.*, 10 U.S.P.Q.2d 1657 (Bd. Pat. App. & Int. 1989), in which the Applicants successfully rebutted the Office's prima facie publication date of a reference cited in a reexamination proceeding. There, the Office provided a copyright registration as prima facie evidence of printed publication. *Id.* at 1658-9. The Applicants, in turn, submitted rebuttal evidence that the copyrighted text was subsequently revised and never published as it existed at the time of the copyright notice. *Id.* at 1659. The Board held that the Applicants's evidence was sufficient to rebut the Office's prima facie date of publication, placing the document outside the purview of 35 U.S.C. § 102(b). *Id.* at 1660.

In the present instance, the Office has provided copies of Telenor Documents as retrieved from the Library in 2005 and cites the date stamped on the front page of these documents as a prima facie date of publication. As in *Research and Manufacturing*, Applicants submitted evidence that the documents were altered at some point after their alleged prima facie publication date. Indeed, the Telenor Documents have been disassembled, added to, and re-assembled. See, e.g., Browne Declaration, ¶¶ 14, 17, 18, 20, 21, 22, 32, 39, 40 and 45. As in *Research and Manufacturing*, because they have been altered at some point since their creation, the documents here are not entitled to their prima facie publication date.

The facts here are also analogous to those of *Carella v. Starlight Archery*, 804 F.2d 135 (Fed. Cir. 1986). There, the Office provided evidence of a mailing date, but failed to provide evidence that members of the public

actually received the disputed documents prior to the critical date. See *id.* at 139; see also *Protein Foundation, Inc. v. Brenner*, Comr. Pats., 260 F. Supp. 519, 520-21 (D.D.C. 1966). Here, the Office has provided evidence of a publication date, but has failed to provide evidence that the altered Telenor Documents existed prior to the critical date. That is, Applicants has provided clear evidence of the Telenor Documents' alteration, and the Office has failed to rebut this evidence. In sum, the weight of evidence destroys the Telenor Documents' alleged status as prior art printed publications.

The Telenor Documents do not qualify as a prior art printed publication under 35 U.S.C. § 102(b). Applicants has supplied sworn, knowledgeable testimony that the documents relied upon by the Office substantially differ from those that were present in the Library nearly two decades ago. The Telenor Documents therefore lack the integrity required to qualify as prior art printed publications under 35 U.S.C. § 102.

b. The Telenor Documents Are Not a Printed Publication Because One Skilled In The Art Of Electronic mail Communications Systems Would Not Have Located the Telenor Documents Using Reasonable Diligence

The so-called Telenor or MDN documents consist of a first document dated April 1986 ("the 1986 Telenor Document") and a second group of documents dated in 1989 (the "1989 Telenor Documents") (collectively "the Telenor Documents"). Applicants received a copy of the 1986 Telenor Document and the 1989 Documents from RIM's counsel who represented that these documents were deposited at the Norwegian University of Science and Technology ("NTNU") in Trondheim, Norway. Applicants investigated the circumstances regarding the Telenor Documents. No one at the NTNU library

would agree to provide an affidavit or declaration attesting to any facts.

Therefore, certain assumptions are made for purposes of this submission that could not be verified and therefore, NTP reserves the right to challenge any of these assumptions. The following assumptions have been made:

- NTP has assumed that the 1986 Document and the 1989 Documents were entered into the BIBSYS system, a computer system used by NTNU and other Norwegian libraries prior to the relevant priority date of the Campana patents and still in use today.
- The 1986 Document is entitled "Mobile Data Network System Description," Norwegian Telecommunications Administration Research Department, Report No. 30/86. The cover page, indicates a date of April 1986 and lists the following authors: Terje Henriksen, Stig Kaspersen, Geir Thorud and Finn Trosby.
- NTP assumes that the BIBSYS entry for the 1986 Document lists the first author, the title, and the following subject matter categories in Norwegian: datamaskinnett, dataoverforing, and mobiltelefon. These categories are translated, respectively, as: computer network, data transmission, and mobile telephone.
- NTP assumes that the BIBSYS system currently allows a user to enter keywords to electronically search the BIBSYS records, including the author, title, and subject matter categories.
- NTP assumes that the 1989 Documents consist of an eight-volume set,¹ each volume entitled "TF Teledirektoratets forskningsavdeling, Mobile Data Network Description." The cover page of each volume is date stamped either February 22, 1989 or April 24, 1989.
- NTP assumes that the BIBSYS entry for each of the 1989 Documents currently lists the first author, the title and volume title, and one or both of the following subject matter categories in Norwegian: datamaskinnett and kommunikasjonsprotokoller. These categories are translated, respectively, as: computer network and communications protocol.

- NTP assumes that, in 1989-91, the BIBSYS system was available for use at one of four universities in Norway and not connected to any outside networks for use from anywhere else.

Under these circumstances and assumptions, the Telenor documents are not printed publications under 35 U.S.C. § 102. 35 U.S.C. § 102 provides, in relevant part:

A person shall be entitled to a patent unless--

(a) the invention was known or used by others in this country, or patented or described in **a printed publication** in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in **a printed publication** in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States,

Whether an asserted anticipatory document qualifies as a "printed publication" under section 102 is a legal conclusion based on underlying factual determinations. *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 936 (Fed. Cir. 1990). The decision whether a particular reference is a printed publication is approached on a case-by-case basis. *In re Klopenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004); *In re Cronyn*, 890 F.2d 1158, 1161 (Fed. Cir. 1989). In determining whether a printed document constitutes a publication bar under 35 U.S.C. § 102 the touchstone is public accessibility. *In re Hall*, 781 F.2d 897, 899 (Fed. Cir. 1986); *In re Wyer*, 655 F.2d 221, 224 (CCPA 1981); *In re Bayer*, 568 F.2d 1357, 1359 (CCPA 1978). The statutory phrase "printed publication" has been interpreted to mean that before the critical date the reference must have been sufficiently accessible to the public interested in the art; dissemination and public accessibility are the keys to the

legal determination of whether a reference was “published.” In *re Cronyn*, 890 F.2d 1158 at 1160. Access involves such inquiries as classification and indexing. In *re Wyer*, 655 F.2d at 226. A document qualifies as a printed publication upon a satisfactory showing that the document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it and recognize and comprehend therefrom the essentials of the claimed invention without need of further research or experimentation. In *re Wyer*, 655 F.2d at 226.

Here, the presently known circumstances and assumptions establish that the Telenor documents are not printed publications. Even if NTP assumes, for the sake of argument, that the Telenor Documents were shelved as of the critical date and were indexed and catalogued as of the critical date as they are presently in BIBSYS, they still cannot qualify as printed publications under § 102, because they were not catalogued or indexed in such a way to make them available to persons interested and ordinarily skill in the relevant art to the Campana patents. See *In re Wyer*, 655 F.2d at 226; *In re Cronyn*, 890 F.2d at 1160.

One skilled in the art of electronic mail communications systems would not have located the Telenor documents using reasonable diligence. See Rhyne Supplemental Declaration, ¶52. The titles of the documents and the subjects under which the documents were categorized show no relationship to electronic mail. One skilled in the art of the Campana references interested in researching his or her field would have searched for relevant materials using

terms such as “electronic mail,” “email,” “electronic message” or perhaps other related terms. See Rhyne Supplemental Declaration, ¶¶50.

Thus, even if this person had been motivated to fly to Norway to use the BIBSYS computer system at one of the four Norwegian libraries, that person would have used those search strategies to attempt to find relevant technologies at the library. Using this reasonable search, that person would not have located any of the Telenor documents. *Id.*

Further, one skilled in the art would not have searched the subject matter category “computer network” absent a qualifier for electronic mail or similar terminology because that category is no more relevant to RF transmission of email than countless other general categories. The same is true for the categories of “data transmission,” “mobile telephone,” and “communications protocol.” In short, one skilled in the art of wireless email would not have found the 1986 Document or the 1989 Documents without an extraordinary expenditure of resources. See Rhyne Supplemental Declaration, ¶¶52.

The Federal Circuit has held that indexing in such a way that one of ordinary skill in the art would not find a document meant that the document was not a printed publication. See, e.g., *In re Cronyn*, 890 F.2d 1158 at 1161 (finding that a senior thesis catalogued only by author was insufficient to make the thesis a publication). The Board found that indexing based on author and title were insufficient to render a document a publication. See *Ex parte Carr and Tonkovich*, 2001 WL 1057413 (Bd. Pat. App. & Int.) (unpublished) (finding that a thesis shelved in the archives and indexed by author and title was insufficient where the title was not particularly described of the subject matter

being claimed in the patent application against which it was being applied). In holding that the thesis was not accessible to the extent necessary to render it a printed publication, the Board explained that “as of the critical date, the thesis ‘had not been either catalogued or indexed in a meaningful way’ such that it could be located by ‘persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence.’” *Id.* The Board emphasized determining whether the document may be found through reasonable diligence rather than the expenditure of extraordinary resources. These cases demonstrate that documents deposited with a university library must be indexed and catalogued in a meaningful way in order to be eligible as printed publications under 35 U.S.C. § 102. The listing of the author, by itself, provides no meaningful access. *In re Cronyn*, 890 F.2d at 1161. Moreover, the listing of a non-descriptive title does not provide access. *Ex Parte Carr and Tonkovich*, 2001 WL 1057413. Finally, it is critical to recognize that in the case of a document deposited in a university library, the document must be accessible based on a person exercising reasonable diligence, not the expenditure of extraordinary resources. *Id.*; see also *Massachusetts Institute of Technology v. AB Fortia*, 774 F.2d 1104, 1109 (Fed. Cir. 1985) (adopting the “reasonable diligence” standard); *In re Wyer*, 655 F.2d at 226 (same); *I.C.E. Corp. v. Armco Steel Corp.*, 250 F.Supp. 738, 743 (S.D.N.Y. 1966) (same).

Applying these cases to the 1986 Document and the 1989 Documents, it is readily apparent that none of these documents would have been publicly accessible on the critical date (assuming *arguendo* that they were indexed and catalogued as they are presently) because they were not indexed or

catalogued in a meaningful way to one of ordinary skill in the art of the Campana patents. Although the Telenor documents may have been indexed by broad subject matter categories, those categories would not have been searched by someone interested in the art relevant to the Campana patents. See Rhyne Supplemental Declaration, ¶¶.

In fact, a January 25, 2006, Wall Street Journal article indicates that RIM itself learned of the Telenor reference via a tip from a purported "industry official" whom RIM has refused to identify. Clearly, this falls short of the requirement that for a reference to qualify as a printed publication under § 102, it must be sufficiently accessible such that a person interested in the art, exercising reasonable diligence, can locate it and recognize and comprehend therefrom the essentials of the claimed invention without need of further research or experimentation. In other words, but for the tip from the "industry official," RIM -- or any other interested person for that matter -- would not have located the Telenor documents. The Telenor documents cannot, therefore, be printed publications under 35 U.S.C. § 102.

c. The Telenor Documents Fail to Render Any of
the Claims of the present application

Applicants has reviewed the documents entitled "Mobile Data Network Description" Volumes 1-4 and 6-82 (referred to collectively as the MDN '89 or Telenor3), focusing on the portions cited by the Patent and Trademark Office. Specifically, the Office Action rejects the Claims as allegedly being unpatentable over Telenor. Applicants do not agree for the reasons set forth

below. Applicants do not agree for the reasons set forth below. Each claim requires several limitations that are not disclosed in the Telenor documents or not sufficiently enabled in those documents.

d. The Telenor Documents Fail To Anticipate All Elements of The Claims

All of the claims recite numerous recitations that are not anticipated by Telenor as asserted by the Office Action.

(i) Telenor Fails to Disclose the “at least one interface ... connecting the at least one electronic mail system ... to the RF information transmission system” Limitation

All claims require the above limitation or one having common requirements. The Office Action points to the MDX as an “interface” that allegedly connects another hMDX and the MHS (which are alleged to be “electronic mail systems”) to the BS and MS of the MDN (which is alleged to be an “RF information network”).

Here Applicants notes that each MDX is not an “electronic mail system” as that term is properly understood in the context of the claims. When properly construed, an “electronic mail system” requires a plurality of processors running electronic mail programming. “Electronic mail programming” is properly defined in the context of the claims as “an application program specially designed to create, send, access and manage electronic mail messages,” with electronic mail messages being defined as “a formatted text message that is transmitted over a communication system [that] ... [a]s originally inputted to an electronic mail system by the sender ... includes the following characteristics: (a) a destination address identifying the person(s), place(s) or object(s) to which the message is directed; (b) an

indication of the sender (which may be added automatically by the electronic mail programming); (c) a subject field (which may be blank); and (d) the inputted message text.” See Rhyne Supplemental Declaration, ¶ 11.

Second Applicants notes that the Telenor documents fail to provide an explanation of how a MDN user (at either a fixed terminal or a mobile station) generates a message as input into the Telenor system. Rather, those documents only describe possible protocols for data that may be transmitted, but do not describe what the user actually does to input a message into the system. See Rhyne Supplemental Declaration, ¶ 24.

Putting these requirements together, to demonstrate anticipation the Office Action would need to establish that the Telenor documents teach a processor running a specially designed application program to enable a user to input a formatted text message that has the four identified fields. The Office Action falls far short of meeting that standard. See Rhyne Supplemental Declaration, ¶ 25.

The Telenor documents fail to establish what type of program is operating on the fixed terminals. As for the mobile terminals, Telenor merely describes an application program on the MS that allows for a user to create a “message” and that several types of message forms may be possible. See Telenor at 7:5-7. The Telenor documents do not describe the elements of these “forms,” however, or that any message so generated is a formatted text message that includes the elements properly required of an “electronic mail message.” Instead, the Telenor documents teach away from providing a formatted text message by stating that only data input by the user may be transmitted over the network due to bandwidth issues. Thus, it appears that

while the information input into the MDN by the MS may include some of the required fields, there is no disclosure that the transmitted textual information will include all of those required fields, such as an indication of the sender. To assert that all of the required fields were present in any messages sent from a Telenor mobile terminal is pure speculation. See Rhyne Supplemental Declaration, ¶ 26.

In a similar failure, the Office Action also has not established that the FT or the MS are processors running “electronic mail programming,” as that term is properly defined in the context of the claims. Thus, each MDX is not the electronic mail system of the claims. The MDX’s connection to other MDX’s does not meet the requirement that the “interface” connect an “electronic mail system” to the “RF information transmission network.” See Rhyne Supplemental Declaration, ¶ 27.

In addition, the MHS UA’s (the alleged “originating processors” in other alleged “electronic mail system”) do not transmit originated information in connection with an address of the MDX (the alleged “interface”), thus failing to meet the limitation requiring that “the originating information is transmitted in association with an address of the one interface from the one of the plurality of originating processors” See Rhyne Supplemental Declaration, ¶ 28.

(ii) Telenor Fails to Disclose the “an RF information transmission system ... [that] transmits at least the inputted message from the one interface through the RF information transmission system to at least one RF receiver ...” Limitation

The claims require that the originated information be transmitted by a RF information transmission system using “RF transmission to at least one RF receiver... .” For this requirement, the Office Action now cites to the disclosure in Telenor of a base station (BS) and a Radio Unit and Radio

Protocol Controller (RPC) with antenna. The Office Action then alleges, without specific citation, that the Telenor documents describe how the BS communicates with the Radio Unit/RPC controller. See the Office Action at 43.

The Telenor documents, however, fail to describe how communication between a BS and the Radio Unit/RPC controller actually occur. Indeed, the Telenor documents indicate only that communications between the BS and the Radio Unit/RPC can occur using one of two protocols – a “Radio Bearer Protocol” and a “Radio Transfer Protocol” on the Radio Bearer Layer and the Radio Transfer Layer, respectively. See Telenor at 3:4-6. Then, at 3:9-10 the documents explain the general goals of the Radio Bearer Layer including that it “shall provide the ability to transport one radiogram between MS and BS” and its goal is to relate to “addressing of sending/receiving MS and BS.” See Telenor at 3:9. Volume 3 then states that the “the above functions is not described in detail in this specification [sic].” *Id.* The next page indicates that the Radio Transfer Layer functionality “will depend on the functionality of the protocol chosen for RBL.” *Id.* at 7:10. See Rhyne Supplemental Declaration, ¶ 30.

Clearly, at the time this document was written the Telenor authors had not resolved how to transfer radiograms between a base station (BS) and the mobile stations (MSs). The required communication protocols had not been designed, for example, and hence were not included in these documents. This fact is further confirmed in Volume 7 where the authors stated that “[s]ince the objective of this study was to describe services, networking and the upper layer protocols for message based mobile communications, no

specific radio protocol has been described.” See Telenor at 7:1. See Rhyne Supplemental Declaration, ¶ 31.

Accordingly, the Telenor documents are insufficient to enable a person of ordinary skill in the art of the Campana patents to build a system for transmission of “originated information” (which is properly defined in the context of the claims as “the message text of an electronic mail message”) using an RF information network to an RF receiver, as specifically required by all of the claims of the Patent. Thus, the Telenor documents fail to anticipate any of the claims of the Patent for this additional reason. See Rhyne Supplemental Declaration, ¶ 32.

(iii) Telenor Fails to Disclose the “broadcasting the inputted message and the identification of the at least one designated RF receiver from the at least one broadcast location to the at least one designated RF receiver” Limitation.

The Claims require the above limitation or one having similar requirements. As described in the preceding paragraphs, the Telenor documents fail to enable one of ordinary skill in the art to build a system for broadcasting an inputted message from a broadcast location to a “designated RF receiver.” Applicants incorporate the above analysis here. See Rhyne Supplemental Declaration, ¶ 33.

(iv) Telenor Fails to Disclose the “interface comprises a processor, a bus coupled to the processor and to a plurality of ports, at least one of the plurality of ports being coupled through a modem to the RF information transmission system and at least another of the plurality of ports being coupled through a modem to the at least one electronic mail system” Limitation

The Claims further require the above limitation or one having similar elements. The Office Action alleges that the MDX is the “interface” of this limitation, but its analysis makes several fundamental errors in that regard. See Rhyne Supplemental Declaration, ¶ 34.

First, as discussed above, the Telenor documents fail to disclose an “interface” and certainly fail to provide the specifics of the “interface” required by this limitation. Second, the Office Action asserts that a single FT is “at least one electronic mail system,” but as discussed above, the individual components of the MDN do not constitute an “electronic mail system” as that term is properly construed in the context of the claims. The Office Action thus fails to identify a “modem” connecting the MDX to a true electronic mail system as required by these claims. See Rhyne Supplemental Declaration, ¶ 35.

In addition, the Office Action states, without any specific citation, that another port is connected via a modem to the RF information transmission system. There has certainly been no showing that use of multiple ports as required by the above limitation is inherent in the disclosed Telenor system. See Rhyne Supplemental Declaration, ¶ 36.

e. Dependent Claim Differences

In addition to the above-explained reasons that all of the claims are patentable over Telenor, some of the dependent claims are further patentable for additional reasons based on the limitations added by those claims.

For example, the claims require that information inputted into the system “identifies the at least one RF receiver.” The Office Action attempts to equate an address of the destination processor with an address identifying the

“at least one receiver.” The Office Action essentially admits, however, that the Telenor documents do not disclose information inputted into the Telenor system which meets that limitation by only pointing to the addresses of an MS as the alleged RF receiver identification and then asserting that the MS includes the RF receiver. An address of a destination processor does not necessarily identify an RF receiver, however, and since the Telenor documents fail to provide sufficiently enabling disclosure related to broadcast of information to the RF receivers, as explained above, it does not follow that the destination processor and RF receiver identifications are the same, as the Office Action alleges to be inherently disclosed. See Rhyne Supplemental Declaration, ¶ 38.

The claims recite that the “address of the one interface is inputted into the system at the one of the plurality of originating processors before inputting of the inputted message.” The Office Action asserts that this limitation would have been inherently disclosed in the Telenor documents because a MXA address must have been pre-stored in the MS. That assertion is without support, however. Applicants submits that inherency requires that the alleged conclusion be the necessary result based on the disclosure. It is not necessary, for example, that a MXA address be pre-stored in the MS. The Telenor system could have just as easily required that the user provide the MXA address every time the user wanted to address a recipient. The Office Action’s unsupported inherency position lacks any foundation in the Telenor documents. See Rhyne Supplemental Declaration, ¶ 39.

The claims assembl[ing] the processed electronic mail message with processed electronic mail messages received from a plurality of the

originating processors in the one of the electronic mail systems into a packet” and then “transmit[ting] the packet to the RF information transmission network.” The Office Action alleges that the Telenor documents disclose this feature because those documents mention sending multiple messages to a NA. See the Office Action at 48. This statement is unsupported and is not necessarily true. The Office Action’s assertion that a group of messages is a “packet” in the context of the claims is clearly an improper application of that term. As properly defined, a “packet” is a “bundle of data, usually in binary form, organized in a specific way for transmission. A packet consists of the data to be transmitted and certain control information.” See Rhyne Supplemental Declaration, ¶ 40.

There is no suggestion in the cited portion of the Telenor documents that the multiple messages sent to an NA are bundled together in an organized way for transmission. Rather, multiple messages may simply have been sent separately as separate packets. Because the Telenor documents contain no express disclosure regarding the nature of the briefly mentioned message assembly, one of ordinary skill in the art would not have understood that the multiple messages sent to the NA would be required to be assembled into a single packet. The Telenor documents thus fail to anticipate these dependent claims for this additional reason. See Rhyne Supplemental Declaration, ¶ 41.

The require “another electronic mail system,” thus requiring at least two electronic mail systems. The Office Action at page 46 alleges that the “entire MHS network connected to the MDN enables plural email systems to connect and communicate to the MDN network using one of a plurality of email

services which subscribe [to] the MHS email system.” It is very unclear what the two distinct electronic mail systems are according to the Office, however. As written, the Office Action does not demonstrate anticipation of that limitation. See Rhyne Supplemental Declaration, ¶ 42.

In other sections, the Office Action suggests that each home mobile data exchange (hMDX) disclosed in the Telenor documents as well as the Message Handling System (MHS) are “electronic mail system[s].” If the MDX’s are not electronic mail systems, then the MDX does not couple to a plurality of electronic mail systems as required by these dependent claims, and clearly, each MDX is not an “electronic mail system” as that term is properly understood in the context of the patent. See Rhyne Supplemental Declaration, ¶ 43.

The claims recite “at least one gateway switch.” For this requirement, the Office Action identifies the MIWU as an alleged “gateway switch.” That switch is properly defined in the context of the claims to be a “processor in an electronic mail system which connects other processors in that system and has additional functions for supporting other conventional aspects of the electronic mail system such as receiving, storing, routing, and/or forwarding electronic mail messages.” See Rhyne Supplemental Declaration, ¶ 44. The Telenor MIWU, however, is not such a processor. The MHS is described as being a generic transport protocol for transport of many types of messages, including telex, teltex, facsimile and others. See Rhyne Supplemental Declaration, ¶ 45.

There is no disclosure of the MIWU being a processor in an electronic mail system, which requires that it operate electronic mail programming (a


specially designed application program for creating, sending, accessing, and managing electronic mail messages as properly defined). Thus, the MIWU is not the "gateway switch" required by these claims. See Rhyne Supplemental Declaration, ¶ 46.

In view of the foregoing amendments and remarks, Applicants submit that the claims are in condition for allowance. Accordingly, early allowance of the claims is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (780.29643CX5).

Respectfully submitted,

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